Application No.: 10/665,275 2 Docket No.: 146712004300

This Listing of Claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

- 1. (Currently amended) A rotary apertured interferometric lithography (RAIL) system comprising an interferometric tool, a rotating stage, a laser beam and a mask having an aperture that creates a servo pattern in a master for magnetic-contact printing, wherein the master has a feature having a size of less than 0.35 micron and a standard deviation of a period of the feature of less than 1 nm.
- 2. (Original) The RAIL system of claim 1, wherein the servo-pattern tracks a recording-head trajectory of a hard disk drive.
- 3. (Original) The RAIL system of claim 1, further comprising a phase shifter that controls a position of an interference fringe.
- 4. (Original) The RAIL system of claim 1, wherein the aperture is an arc-shaped slit.
 - 5. (Canceled)
- 6. (Original) The RAIL system of claim 5, wherein the system forms a trackpitch determined by a wavelength of a laser of the laser beam and an incident angle of the laser beam.

7. (Canceled)

- 8. (Withdrawn) A master comprising a feature having a period, wherein a standard deviation of the period is less than 1 nm and the master is a master for magnetic-contact printing.
- 9. (Withdrawn) The master of claim 8, wherein the master contains a servo-pattern that tracks a recording-head trajectory of a hard disk drive.
- 10. (Withdrawn) The master of claim 9, wherein the feature has a size of less than 0.35 micron.
- 11. (Withdrawn) A method of manufacturing a master comprising applying a resist to a substrate, patterning the resist by interferometric lithography to form a patterned resist, and depositing a metal on the patterned resist, wherein the master has a feature having a standard deviation of a period of the feature of less than 1 nm and the master is a master for magnetic-contact printing.
- 12. (Withdrawn) The method of claim 11, wherein the depositing a metal comprises sputtering depositing a metal layer and subsequently electroplating a metal film on the metal layer.

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13. (Withdrawn) The method of claim 11, wherein the patterning the resist comprises exposing the resist to a laser beam and developing the resist.

- 14. (Withdrawn) The method of claim 11, wherein the patterned resist contains depressions of different depths.
- 15. (Withdrawn) The method of claim 11, wherein the feature has a size of less than 0.35 micron.
- 16. (Withdrawn) A method of forming a servo-sector in a magnetic disk medium comprising contacting a master having a feature having a standard deviation of less than 1 nm to the magnetic disk medium and exposing the master to a magnetic field.
- 17. (Withdrawn) The method of claim 16, wherein the exposing the master to a magnetic field creates a magnetic pattern in a magnetic layer of the magnetic disk medium.
- 18. (Withdrawn) The method of claim 17, wherein the magnetic pattern has a standard deviation of less than 1 nm.
- 19. (Withdrawn) The method of claim 18, wherein the magnetic pattern has a size of less than 0.35 micron.

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